the Malaysian Prime Minister's Dept, the Sabah Chief Minister's Dept, and the Sabah Forest Dept (especially Patrick Andau) for permission to undertake research in Sabah.

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Subspeciation in the Afrotropical Superb Starling *Lamprotornis superbus*

by P. A. Clancey

Received 12 May 1986

In his important pioneer study of the complex East African avifauna of over 60 years ago, van Someren (1922) states that in the Superb Starling *Lamprotornis superbus* Rüppell the average wing-length in both sexes in East Africa is 125 mm, the maximum 128 mm, ie. larger than in the case of the White Nile population. Since the publication of this brief statement, possible geographically related variation in this sturnid seems not to have been investigated in any depth by other workers. Recent research effected at the British Museum (Nat. Hist.), Tring, and in southern African centres confirms that the species exhibits significant size-variation necessitating its recognition as a polytypic species.

The Superb Starling was described in 1845 from Shoa, Ethiopia, by Dr W. P. E. S. Rüppell and ranges from the southern Sudan in Equatoria, central and southern Ethiopia and northern Somalia, south through the drier interior aspects of East Africa to reach its range limits immediately north of Lake Malaŵi. While broadly distributed in the north of its range, to the south of the Kenya/Tanzania border the starling's distribution becomes markedly attenuated west–east, and this is underscored by the finding that Tanzanian elements are longer in the wing in relation to the tail-length than in the case of the northern representatives (clearly shown in Table 1). As a result of this finding, the populations of *L. superbus* are now arranged in 2 subspecies, as hereunder presented.

The Superb Starling has for long been grouped with a range of relatively dull-coloured starlings, such as *Spreo bicolor, S. albicapillus* and *S. fischeri* in the genus *Spreo* Lesson, 1831 (type-species *Turdus bicolor* Gmelin), but is

TABLE 1

Wing- and tail-length data (in mm) of material examined of the 2 subspecies of the Afrotropical Superb Starling *Lamprotornis superbus*

		Wings				Tails				
Territory	Sex	n	range	$\bar{x}$	SD	n	range	$\bar{x}$	SD	w/t ratio
			Lamprotornis superbus superbus							
Ethiopia	♂♀	23	115–126.5	121.3	3.21	23	57–71	64.6	3.48	53.2
Sudan	♂♀	13	112–122.5	116.1	3.12	13	59–67.5	63.0	2.17	54.2
Kenya	♂♀	33	113–127	119.9	3.25	33	55.5–69	62.0	3.28	51.7
Somalia	♂♀	19	113–125.5 (128.0)	120.2	4.38	—	—	—	—	—
			Lamprotornis superbus excelsior							
Tanzania	♂♀	22	126+–133	128.2	1.96	22	63–71	67.2	1.99	52.4

Statistical comparisons

	Wing	*Tail*
L.s. excelsior compared with contiguous Kenyan sample of *L.s. superbus*	$t=10.55$ $p<0.001$ $DF=53$	6.54 $p<0.001$ $DF=53$
Same compared with Ethiopian sample	$t=8.46$ $p<0.001$ $DF=43$	2.99 $p<0.01$ $DF=43$

now increasingly placed with the wide assemblage of coruscant Afrotropical "glossy" starlings in the genus *Lamprotornis* Temminck, 1820 (type-species *Turdus caudatus* Statius Müller). (See papers on this issue by Clancey 1958 and Craig & Hartley 1985.) Two generic names have been introduced by specialists for the Superb Starling, these being *Lamprospreo* Roberts, of 1922, and *Painterius* Oberholser, of 1930. Amadon, in the continuation of Peters' *Check-List* (1962), places these in the synonymy of *Spreo,* but they should in fact be lodged in that of *Lamprotornis.*

The names, characters and ranges of the 2 subspecies of the Superb Starling will now stand as follows:

Lamprotornis superbus superbus Rüppell

Lamprotornis superbus Rüppell, *Syst. Uebers. Vög. Nord-ost-Afr.,* 1845, p. 65: Shoa, central Ethiopia.

Measurements. Wings in adult ♂♀ from Ethiopia 115–126.5 (121.3) mm, tails 57–71 (64.6) mm. In the "southern" Kenya population wings in ♂♀ 113–127 (119.9) mm, tails 55.5–69 (62.0) mm (Table 1).

Material examined. 96 specimens:– *Ethiopia:* Adau (Danakil); "Shoa", Addis Ababa; Tadechamulka; Lake Zwai; Alia Amba; Addis Alam; Billen; Yabelo (=Yavello); Harar. *Sudan:* "Sudan"; Mongalla; Kit R. (Bahr-el-Ghazal); 32 km NE of Torit; Eros, Didinga Mtns. *Somalia:* "Somaliland or Somali"; Burao; Waghar Mtn; Sogsodi; Geloke; Gedais; NW of Obbia. *Kenya:* "Masai"; Mtito Andei; Tsavo; Voi; N Uaso Nyiro R; Machakos; Fort Hall; Loita Plains; Nguruman Hills; Lake Naivasha; Athi R; Garissa; Chanler's Falls; Lokori; Kongelai; Katcheliba (Suam R). *Tanzania:* Itumba (Wembere Steppe); Choma, S Paré.

Range. Central and southern Ethiopia, reaching the Danakil region in the east and Harar in the southeast, the southern Sudan in Equatoria, northeastern Uganda towards the Kenyan border, Kenya (largely absent on coast), Somalia, and Tanzania in the north to the east of Lake Victoria in the Wembere Steppe, and in the east to the foothills of the Paré Mtns.

Remarks. The xeric Somali population is slightly differentiated from more western populations in showing on average a broader white breast band and lighter, more golden, rufous lower ventral surfaces.

Lamprotornis superbus excelsior, subsp. nov.

Type. ♂, adult. Breeding (young in nest). Lake Basuto, near Mt Hanang, Tanzania, at 1585 m a.s.l. 12 August 1951. Collected by M. P. Stuart Irwin. In the collection of the National Museum of Zimbabwe, Bulawayo, Mus. Reg. No 99021. *Measurements of the Type:* wing (flattened) 132, culmen from base 25, tarsus 36.5, tail 68 mm.

Diagnosis. Differs from the nominate race (as above) in having a longer wing – 22 ♂♀ 126–133 (128.2) mm, and tails 63–71 (67.2) mm. The tail is less variable in length but not longer than in *L.s. superbus.* Ranges slightly darker rufous below.

Material examined. 25 specimens:– *Tanzania:* "Tanganyika"; Ngorongoro Crater; Manyoni; Dodoma; L Basuto, Hanang; Sengaruka Plains; Kilosa; Iringa; Ugogo; N end of Lake Malaŵi.

Range. The dry plateau regions of the interior of Tanzania to the south of the range of *L.s. superbus* from Serengeti and the Ngorongoro Crater, south to the west of 37°E to the northern limits of the southern highlands, but taken at the northern end of Lake Malaŵi. In central Tanzania not much to the west of 34°E.

Remarks. The Tanzanian sample of *excelsior* of 22 ♂♀ compared with one of 33 of the contiguous Kenyan population of nominate *L. superbus* gives a CD (coefficient of difference) value of 1.59, which indicates a joint non-overlap of 95% between the two – well above the conventional level of subspecific difference. The same sample of *excelsior* compared with the Ethiopian (topotypical) one of 23 specimens of *L.s. superbus* gives a value of 1.33, which is again above the conventional subspecies level of 1.28.

Acknowledgements: For the provision of facilities for research at the British Museum (Nat. Hist.), Tring, I am grateful to Mr P. R. Colston of the staff. In southern Africa, Dr J. M. Mendelsohn provided logistical support at the Durban Natural History Museum, while Mr H. D. Jackson of the National Museum of Zimbabwe, Bulawayo, assisted with the loan of specimens preserved in that centre. To all concerned I express my thanks.

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